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(54) Title: **ACOUSTIC SENSORS AND METHODS**

(57) Abstract: Acoustic sensors, preferably surface acoustic wave sensors, and more preferably shear horizontal surface acoustic wave sensors that include soluble polymers, monomers (optionally mixed with oligomers and/or polymers formed from such monomers), or multifunctional compounds, for example, that can function as either waveguide materials, immobilization materials for secondary capture agents (e.g., antibodies), or both.

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